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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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J GEORG SEKA
TOWNSEND AND TOWNSEND AND CREW
TWO EMBARCADERO CENTER
8TH FLOOR
SAN FRANCISCO, CA 94111

EXAMINER

HEPPERLE, STEPHEN M

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 07/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/254,743	Applicant(s) WEBER ET AL.	
	Examiner Stephen M. Hepperle	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-40 and 42-55 is/are rejected.
- 7) ☒ Claim(s) 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant's Request for Continued Examination has been received.

Claims 1-33 have been cancelled.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 34, 39, 44-46, 48, and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Norell et al. Norell shows a ceiling (Fig. 1) comprising (Figs. 3-4) fluid heating or cooling tube mat 11, 12 sandwiched between upper 5 and lower 5 building panels, described as having "a structure desirable in respect of the finished ceiling" (col. 3, lines 30-33). Note wood spacers 4 forming a hollow space for the mat, as well as thermal layer 8 and reflective layer (foil) 9. Cooling is discussed in col. 5, lines 27-35. Regarding claims 44-46, Norell appears to present his invention as prefabricated complete panels 1 (Fig. 1) assembled to other ceiling panels. The thermal barrier is seen as inherently providing some sound insulation. Alternatively, layer 9 can be seen as the thermal barrier and the blanket 8 as the sound insulation. The panels can be mounted directly to the ceiling rafters.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35-38, 40-43, 47, and 49-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norell et al. It would have been obvious to use plastic cooling tube mats in a

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cooling environment to reduce cost (claim 35). It would have been obvious to use plaster/gypsum drywall (aka Sheetrock) for the building panels 5 as such is by far the most common building panel used, and to secure the upper panels to the ceiling joist with drywall nails or screws in accordance with normal construction practice (claims 36, 37, 49). Also note Norell discusses taping the joints, a process used with drywall only. Alternatively, it would have been obvious to suspend the ceiling if installed in a basement of other area with plumbing/ductwork extending below the joists, as is also common practice in the construction trades (claims 50-53). It would have been obvious to place the hangers at regular intervals to allowing panels to be hung anywhere (the idea of interchangeable parts—any panel will fit anywhere). Regarding claim 38, it would have been obvious to use aluminum foil as the thermal reflective layer as it is commonly used for that purpose. Regarding claim 54, it would have been obvious to put holes in the lower panel to install lights or ceiling fans.

Claims 35, 39, 40, 42, 43, and 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norell in view of Herbst. Herbst shows a ceiling cooling panel that is suspended from a ceiling, uses plastic cooling mats, has holes 12 in the bottom panel, and uses sound deadening "fleece" either above the tubes and plate, or affixed to the bottom of the lower plate. It would have been obvious in view of Herbst to use cheaper plastic mats in Norell and to suspend the panel from the ceiling using hangers spaced regularly so that the a panel with regularly spaced attachments may be suspended. It would have been obvious in view of Herbst to put holes in the lower Norell panel to increase sound absorption or and to fix sound absorbing fleece to the bottom of the panel to increase sound absorption.

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Claim 41 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Arguments filed with the RCE of 9 March 2004 are moot in view of the new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Hepperle whose telephone number is 703-308-1051. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 703-308-1272. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Stephen M. Hepperle
Primary Examiner
Art Unit 3753

SMH